



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-50E2 BYPASS RATIO: 4.3  
 UNIQUE ID NUMBER: 1GE009 PRESSURE RATIO ( $\pi_{00}$ ): 29.8  
 COMBUSTOR:  
 ENGINE TYPE: TF RATED THRUST ( $F_{00}$ ) (kN): 230.4

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	37.3	99.0	64.3	4.8
AS % OF ORIGINAL LIMIT	190.1	83.9	64.6	25.5
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			80.7	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			96.5	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			109.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			129.0	

### DATA STATUS

x PRE-REGULATION  
 - CERTIFICATION  
 x REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	2.487	0.60	0.50	36.30	4.1
CLIMB OUT	85	2.2	1.975	0.70	0.50	29.70	2.7
APPROACH	30	4.0	0.660	1.00	4.30	9.50	2.7
IDLE	7	26.0	0.215	21.80	61.80	3.60	4.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			859	7715	21591	14247	-
NUMBER OF ENGINES				6	6	6	6
NUMBER OF TESTS				6	6	6	6
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				33.5	93.7	61.8	4.5
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				3.8	4.6	0.5	1.5
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.3-100.4
TEMPERATURE (K)	270-296
ABS HUMIDITY (kg/kg)	0.0027-0.0103

### FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	17.1

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: Production Engine Test  
 TEST LOCATION: Production Test Cells M34 & M35  
 TEST DATES: 12/10/1979-05/12/1979

### REMARKS

1. Ref Report no FAA-EE-80-27 (GE Report R80AEG420)

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)